DOCUMENT RESUME

ED 261 898 SE 046 030

TITLE	Youth and Environmental Education.
INSTITUTION	United Nations Educational, Scientific, and Cultural Organization, Paris (France).; United Nations Environment Programme, Nairobi (Kenya).
PUB DATE	Dec 84
NOTE	9p.
AVAILABLE FROM	UNESCO, 7, Place de Fontenoy, 75700 Paris, France.
PUB TYPE	Reports - Descriptive (141) -- Collected Works - Serials (022)
JOURNAL CIT	Connect; v9 n4 Dec 1984
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Elementary Secondary Education; *Environmental Education; *Global Approach; Higher Education; Nonformal Education; *Program Descriptions; *Youth; *Youth Programs
IDENTIFIERS	Australia; *Hong Kong; *Spain

ABSTRACT

The United Nations General Assembly decided in 1979 to make 1985 International Youth Year (IYY). Several of the central themes of this year (participation, development, and peace) are directly concerned with education and action relative to an improved, sustainable environment, both natural and built. This issue of the Unesco-UNEP (United Nations Environment Programme) environmental newsletter Connect focuses on environmental education (EE) and youth. It contains: (1) an overall report on youth and EE globally, which is based on a chapter of a sourcebook in nonformal EE to be published by the Unesco-UNEP International EE Programme; (2) a summary of Unesco activities related to youth; (3) UNEP actions for IYY; (4) highlights of a World Assembly of Youth workshop on population, environment, and development; (5) goals of and activities at the Spanish Center for Environmental Education "Los Molinos" (CEMA-Centro Educativo del Medio Ambiente); (6) a discussion of EE activities in Hong Kong; (7) a description of university-level EE activities in Australia; (8) highlights of a seminar on nonformal scientific EE; and (9) short descriptions of recent EE publications, organizational activities, and other types of EE news. (JN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED261898

Connect

UNESCO-UNEP ENVIRONMENTAL EDUCATION NEWSLETTER

Vol. IX, No. 4, December 1984

BEST COPY AVAILABLE

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
Susanne Adlung
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Youth and Environmental Education

The General Assembly of the United Nations decided, in 1979, to make 1985 **International Youth Year**. Several of the central themes of this year — participation, development and peace — are directly concerned with education and action relative to an improved, sustainable environment, both natural and built. Elsewhere in this issue are reports on various plans and programmes involving youth EE activities for 1985. On this and the following page is an overall report on youth and environmental education (EE) globally.

Firstly, regarding the Youth Year themes of *participation* and *development*, it should be noted that stress is placed on the local *problem-solving* approach to environmental education by the Unesco-UNEP International EE Programme and consequently on *community-based* action for the prevention and solution of environmental problems as well as for improved environmental quality. Secondly, a major concern of the International EE Programme is the furthering of environmentally sound concepts — and the values constituting an environmental ethic — contributing to a nation's development in terms of minimum environmental damage and optimum preservation and improvement of the nation's natural and cultural heritage.

Much has been done by Member States regarding the environmental education of youth according to these principles of problem-solving participation in community development. Legislation has been established in many States directly or indirectly to this effect, often as part of general public EE. In Indonesia, for instance, rational use of the country's natural resources is a component of a state policy and of the nation's Five Year Development Plan, resulting in a law regulating environmental management for the enhancement of environmental quality and in a later law (1982) declaring that a *well-informed, environmentally educated citizenry* is vital for its realization. Similarly legislation has been developed in the Netherlands to improve public information and discussion on projects involving environmental impacts *before* they go to parliament for approval. Poland's 1980 Environmental Protection Law includes requirement of EE in all on-the-job training courses for workers and the obligation of the mass media to promote proper environmental attitudes and behaviour on the part of the public.

SE 046 030

Nonformal or out-of-school education on the environment is generally deemed of special importance for youth (roughly the period from fifteen to twenty-five years of age). Both governmental and nongovernmental organizations are involved, encompassing a wide variety of forms, among which are: (1) self-governing youth organizations, such as the Indian Environmental Society and the Dutch Christelijke Jeugbon van Natuurvrieden; (2) conservation work camp groups, such as the 4H and 4D Clubs in the U.S.; (3) university student societies engaged in out-of-school EE activities, such as the Youth Committee for the Protection of Nature in the USSR and the Youth Environment Programmes for west Africa; (4) environmental action groups, ecology and recycling centres, such as the Nuclear-Free Pacific Youth Group and Friends of the Earth clubs in many developed countries; (5) museum, zoo and young naturalists' clubs, such as the Museo Nacional de Historia Natural in Santiago; (6) nature and field study centres, such as the Tree Tops School Camp in Zambia; and (7) non-specialist organizations, such as scouts, pioneers, civic, religious and political youth groups engaged in environmental study and action.

Among the particularly active nongovernmental bodies in the Arab Gulf States are: the Saudi Biological Society, which plays a major role in the preservation of wildlife through educational programmes; the Iraqui Environmental Protection Society, whose activities are primarily in the form of publications for stimulating public awareness; and the Kuwait Environmental Protection Society, which is among the most enterprising in the Gulf area. Governmental organizations, such as Oman's Council for Conservation of the Environment and Prevention of Pollution and Kuwait's Department of Nature Protection function largely by involving people in competitive environmental protection activities.

Facilities that provide learning environments for nonformal EE youth activities may be grouped as fixed or movable. *Building facilities*, though fixed, are the most varied and limitless in opportunities, as these examples testify: libraries, museums, zoos, aquaria, farms, biological centres and stations, general environment centres, interpretative nature or town centres, ecology and wildlife camps, resident outdoor schools, historical sites, etc. In Poland the Nature Protection League, in cooperation with youth and other groups, sets up nature camps and environmental research centres. Science camps in which participants undertake projects related to the community and its environment are organized by the Field Work Centre of Sri Lanka, the Science Club of Thailand, the Science Foundation of the Philippines and several youth organizations in India.

Transported or mobile facilities, on the other hand, provide learning experiences for youth and other target groups, especially those in scattered communities spread over a large area. Mobile units, such as bookmobiles and motorized audiovisual units, including traveling exhibits, are good examples. "Enviro-vans" are now seen in Canada, Africa and other parts of the world.

Integration of an environmental component into nonformal education programmes for youth and others has taken a variety of forms. In Asia, promotion of literacy and knowledge of numbers has led to functional programmes based on real-life situations. Thus, environmental education has become an essential element. The Department of Nonformal Education of Thailand, for example, emphasizes health, hygiene, nutrition and forest conservation. Its programmes are ultimately to be implemented by rural nonformal and lifelong education centres. The curriculum developed by the Department of Nonformal Education of Nepal includes similar activities. Its textbooks for pure literacy have environmentally related topics and its books and pamphlets for the newly literate focus on environmental problems of immediate community concern.

There is a growing movement to incorporate environmental themes in *all* textbooks and teacher guides, resulting in an interdisciplinary approach to the teaching/learning process. Member countries of the Council of Mutual Economic Assistance (CMEA) have initiated a cooperative project devoted to documenting all aspects – socio-economic, organizational, legal and pedagogical – of environmental conservation. In Sweden the "pervading theme" approach has led to the production of instructional materials designed not only for class lessons but also for field studies and community action. In the U.S., a multidisciplinary series of textbooks complemented by teachers' guides, entitled *People and Their Environment*, contains over 400 lessons which relate science, social science, home economics and outdoor activities to the environment. Sometimes a particular environmental problem has provided the focal point for EE materials, as in Japan, where air and water pollution is of special concern – wherefore the many guides, manuals, supplementary readers and other materials published by Japan's Metropolitan and Prefectural Boards of Education in their anti-pollution education campaigns.

Conventional teaching aids are being successfully adapted to nonformal EE for youth, such as posters, films, filmstrips, slides and tapes, models, etc. In the USSR, there have been 150 films produced on environmental themes, both feature length and shorts, from 1977 to 1980, in addition to an unending production of EE slides and tapes. Some innovative materials available for EE include environmental kits, games and simulation and integrated teaching/learning modules. Three of the latter units have been developed in Argentina for use in and out of school. Six modules have been developed from a pilot project in the Mongolian People's Republic on rare-plant protection, transport and environmental protection, rational use of mineral resources, national customs and EE, medicinal plants and their usages and land as the property of the nation.

The mass media – press, radio, films and television – are considered a major way to reach the public, even in remote regions. Special efforts have been made in all African countries, for example, to reach youth and adults by radio and television, notably, in Ivory Coast, Kenya and Senegal. During the month of March 1980 alone in China, 2,000 newspaper articles appeared on environmental pro-

tection. Direct participation is emphasized in the work of the Instituto de Desarrello de los Recursos Naturales Renovables (INDERENA) of Colombia, linking theory and practise, knowledge and decision-making, specialists and community leaders, youth and adults. The Volunteers Environmental Resources Centre of Scotland promotes a self-help approach among youth. By providing tools, transport and training, the centre encourages youngsters to take direct action in conserving and improving their local environments for the benefit of the community.

In Kenya field trips are conducted by the Wildlife Clubs to agricultural and health centres where environmental issues are discussed. In the Bahamas trips are conducted by the National Trust to sites where environmental protection and preservation of the historical heritage are demonstrated. The Sahel-Vert (Green Sahel) operation conducted in Senegal has resulted to date in the involvement of 1,690 youth in a tree-planting campaign covering almost 700 hectares of the Sahel Desert. Various types of theatrical experiences have been adapted to environmental themes and problems, whether in the form of socio-drama, traditional theatre or puppet show. In the U.S. there are country singers and other musicians whose themes are concentrated on the environment and its protection and on raising the public's environmental consciousness. The René Dubos Centre for Human Environment, located in New York, has been particularly active in organizing forums and other public meetings for the EE of youth and the general public.

As out-of-school EE programmes for youth have expanded, so have training programmes for educational and instructional personnel. For example, from 1979 to 1981, eight training programmes were conducted in China for key personnel or cadre by the former Office of Environmental Protection of the State Council. In the Philippines multidisciplinary workshops have been quite effective and the Consumer's Association of Penang, Malaysia, a citizens' action group, has an extensive programme on the environment for its own members as well as for youth and the general public. In Sweden nonformal EE activities reached a high point as early as the mid-1970s, when approximately 75,000 youth and others participated in courses whose basic materials were designed by Sweden's Industrial Safety Council. In both Indonesia and Brazil there have been major projects involving the *linkage* of formal and nonformal EE so as to engage vaster number of youths in more effective and longer lasting environmental action plans.

(The above report is based on a chapter of a sourcebook in nonformal environmental education, to be published by the Unesco-UNEP International EE Programme. Its publication and availability will be announced in *Connect.*)

Youth, EE and Unesco

1985 as International Youth Year is not one year in isolation for Unesco. Since 1955 the Organization has had a Youth Programme to encourage the participation of young people in all its activities. Specifically regarding environmental education, in 1975, cooperatively with UNEP (United Nations Environment Programme), Unesco launched the International EE Programme, whose activities for 1984-1985 are described in *Connect*, December 1983.

More generally, Unesco's activities concerning young people focus on three main objectives: (1) encouraging research regarding young people in different parts of the world; (2) promoting the dissemination and exchange of information on and for young people; and (3) to assist in drawing up policies and implementing programmes intended to increase the part played by young people in all aspects of social life.

Under the third heading in particular and in conjunction with UNEP, UNDP (UN Development Programme) or other similar bodies, Unesco works with the countries concerned to implement national programmes whose aim is to involve young people more closely in the process of national development —which includes environmental education for environmentally sound and harmonious development. Out-of-school training in science, technology and other environmentally linked studies is one of the important activities developed by the Organization among youth through training courses, clubs, forums, summer camps, extension programmes and teaching materials dealing with applications to agriculture, industry, community daily life, etc. Unesco also encourages young people to participate in decision-making, including environmental problem-solving.

In preparation for International Youth Year, a seminar on "Youth Work Camps for the Protection of the Heritage" was organized by Youth and Heritage (ICOMOS) in France, May 1984, on Unesco's initiative. Participants from Europe and Africa made specific recommendations that young people still attending school be made aware of the value of their cultural heritage (including the natural environment as well as historic sites). They also recommended promoting the creation of national associations for youth and heritage and the development of pilot projects for collaboration among young people of all countries.

Among the events and activities for Youth Year has been the international competition organized by Unesco on the theme of "Tomorrow's Habitat". Students of architecture schools and architects under the age of 35 from 55 countries have submitted projects for a dwelling to be integrated into a small urban or rural community, illustrating types of dwelling appropriate to the socio-cultural context of their countries. The models produced by the ten prizewin-

ners of ten respective countries will be exhibited at the international exhibition, "Tsukuba 85", to be held in Japan.

Other Unesco activities connected with International Youth Year include: a study on the participation of university students in the development process, especially in the least developed countries; implementation of projects to enable young people to become more closely involved in the planning of development activities for literacy, rural development, cultural events, improvement of living conditions, etc.; implementation of development activities calling for voluntary work by young people at local, national and international levels; and production of a videogram, to be made available in 1985, on a pilot project for socio-cultural action on behalf of a disadvantaged community, prepared, conducted and managed by a group of young volunteers.

(For further information, write to: Unesco, Youth Division, 7, place de Fontenoy, 75700 Paris, France.)

UNEP, EE and Youth Year

Environmental education is considered an important supporting measure for the management, development and improvement of the environment. The principal effort of the United Nations Environment Programme (UNEP) in this field has been through the International EE Programme, launched cooperatively with Unesco in response to Recommendation 96 of the UN Conference on the Human Environment, Stockholm, 1972. (See previous article as well as last issues of *Connect*.) In addition, UNEP has provided catalytic support for the EE activities of selected bodies and organizations, such as the International Union for Conservation of Nature and Natural Resources (IUCN) and others.

Concrete UNEP actions for International Youth Year include new as well as ongoing activities, which encompass (1) the production of short "features" or articles specially designed for the information media, but of which a number can be used by youth leaders ("How Young People Can Help to Conserve Soil", "How Young People Are Involved with Marine Mammals", etc.); (2) supporting the production of materials and posters, such as the *Panda* series and "For Every Child a Tree" poster; (3) promotion of tree-planting campaigns, particularly by youth organizations; and (4) cooperation in supporting of meetings of youth organizations concerning the environment, its conservation and improvement.

Most recently in connection with International Youth Year, UNEP has provided financial support to the Education Commission of the IUCN for a project whose aim is to disseminate the principles and objectives of the World Conservation Strategy to youth and youth leaders during 1985. Planned activities for the project include: publication of a Youth Leader's Training Manual on Conservation Education (genetic diversity, sustainable development, etc.); compilation of information materials on environmental concerns with which youth groups have been involved; and organization of an International Workshop on Youth for Environment in 1985, with plans for twenty-five participants from all regions of the world. The project is to be implemented in cooperation with UNEP and international youth organizations, especially the International Youth Federation for Environmental Studies.

(For more information, write: Chief, Environmental Education and Training Unit, UNEP, P.O. Box 30552, Nairobi, Kenya.)

EE and World Assembly of Youth

From 28 November to 2 December 1983, the World Assembly of Youth (WAY) conducted an International Youth Workshop on Population, Environment and Development at Colombo, Sri Lanka, in cooperation with UNFPA, UNICEF, UNCSDHA, CIDA Canada, IPPF and UNEP. There were fifty participants from twenty-eight countries of all regions of the world as well as from a number of international nongovernmental organizations.

WAY is an international coordinating body of national youth councils and particularly of Third World organizations, which holds consultative status "A" with the United Nations. WAY organized the Colombo workshop in anticipation of the 1985 International Youth Year and with the objective of bringing youth leaders together to review national and local youth activities and plans and to project interaction among youth organizations internationally.

Of particular interest to environmental educators was the workshop's plenary and group discussion of "Environmental Awareness and Youth Participation". Among general recommendations were: (1) EE should be considered a must at all levels of education from primary school through the university; and (2) special environmental awareness programmes should be created for out-of-school youth and the general public.

Specific action programmes were suggested for Asia, Africa and Latin America and the Caribbean respectively. For *Asia*: (1) youth organizations should launch massive tree-planting programmes and

guarantee tree aftercare; and (2) youth should use all possible forums and media to promote environmental awareness – what environmental quality means for people and why they should preserve it. For *Africa*: (1) environmental action programmes should be conducted in homes, schools, universities and youth organizations; and (2) mass education programmes, such as meetings and exhibitions, should be undertaken for environmental education of the public. For *Latin America and the Caribbean*: (1) mass education programmes should be organized on the value of forests and clean water (since deforestation and water pollution are the region's major environmental problems); and (2) youth organizations should couple mass education and awareness programmes with effective tree-planting campaigns and actions.

(For more information as well as a copy of the Final Report of the Colombo workshop, write: World Assembly of Youth, L. Christinasvej 23, DK 4930 Maribo, Denmark.).

Environmental Education Centre "Los Molinos" — Spain

The Spanish Centre for Environmental Education "Los Molinos" – CEMA (Centro Educativo del Medio Ambiente) – was established in 1975 as one of the social activities of the Savings Bank of the provinces of Alicante and Murcia. CEMA functions in cooperation with the Environment Department of the Ministry of Urbanism and Public Works as well as with the educational authorities of the two provinces. The EE Centre is situated about forty kilometers from the city of Alicante.

The goals of CEMA, which reflect its many functions, are to stimulate environmental awareness, to educate and train people environmentally and to develop environmental study programmes, instructional materials, educational research and regional activities in this field. CEMA's educational and training programmes involve field work. Lectures alternate with guided environmental interpretation tours (CEMA's approximately seventy hectares offer a considerable variety of terrain). There is also practical work in laboratory or workshop. In addition, the Centre produces documented environmental studies.

Principal users of the EE Centre are pupils and teachers at the primary and secondary level. Stays at the Centre are from one to several days according to the particular study programme. CEMA provides without cost a special camping area with the necessary equipment – tents, sleeping bags, cooking facilities, etc. The instructional personnel of the Centre are experienced specialists in disciplines or subject matter related to the environment – biology, chemistry, geology, agriculture, energy, etc. They function within the four different areas constituting the physical and operational structure of CEMA:

1. *The area of terrestrial ecology* permits students at the Centre to discover the various natural ecosystems of CEMA's seventy hectares. Ecological trails equipped with observation posts facilitate the study of local flora and fauna, subsequently followed by lectures and practical work in the Centre's natural science laboratory.

2. *The area of geology* offers cartographic studies of the region in which CEMA is situated as well as the direct study of various local geological phenomena, such as earth plates, and especially varying stages of soil erosion, whose causes are of natural or human origin.

3. *The area of ecological agriculture* acquaints students with appropriate technology as used locally in the vineyards and in the orange, almond, olive and other groves. One technology, for instance, is "drop-by-drop irrigation", which is particularly effective in a semi-arid zone, such as the one in which the Centre is situated. Students have an opportunity, as well, to practise what they have learned in a garden and an experimental glass house made available to them.

4. *The area of alternative energy* consists of an exhibition of energy-producing apparatus, such as photovoltaic panels, wind machines, flat solar collectors, etc., which provide a base for theoretical studies as well as practical activities in a workshop devoted to energy-producing systems. One might note here that the architectural planning of CEMA, particularly its 800 square meter laboratory, makes use of solar energy for both heating in the winter and cooling in the summer (by water evaporation, creation of air currents, etc.). This approach is called "passive and bioclimatic" by the EE Centre.

Supplementing the above educational areas are CEMA's 2000-volume library specializing in most aspects of the environment and an audiovisual centre with a similar emphasis. In addition to educational programmes for young students, CEMA offers retraining courses for primary school teachers and develops educational research activities. In this connection, an EE project is being conducted with the collaboration of the Unesco-UNEP International EE Programme which is aimed at the use of local situations and micro-environments – local farms, factories, schools, natural reserves, etc. – for deriving instructional principles and practises for general EE utilization.

Lastly, it should be noted, the Environmental Education Centre "Los Molinos" plays an important role in stimulating and promoting EE throughout the two provinces it serves through lectures, discussion groups and travelling exhibitions which take place in the region's schools.

(The Spanish Environmental Education Centre

welcomes correspondence and inquiries. Address them to: Centro Educative "Los Molinos", Caja de Ahorros de Alicante y Murcia, Obras Sociales, Avenida Doctor Gadea 1, Alicante (3), Spain.)

Environmental Education in Hong Kong

The Field Studies Centre, an educational institution under the auspices of Hong Kong's Department of Education, has submitted this report on environmental education activities in Hong Kong.

Hong Kong, with a population of over five and a half million but a land area of only about 1061 square kilometers, is one of the most densely populated places in the world. Environmental education is thus one of Hong Kong's most pressing concerns and this is reflected in the special emphasis given to environmental themes in the school curriculum.

Since the early 1970s, a number of major projects involving many thousands of students have been undertaken, including topical investigations such as "Acid Rain", "Clean Water", "Clean Air" and "Shore Watch". With the establishment in 1979 of the Field Studies Centre, regular, long-term environmental education activities have become possible.

The Field Studies Centre is located on a peninsula conserved for scientific interest and is adjacent to two large parks. An outdoor recreation centre provides overnight accomodation for the Centre's participants. The Centre is action-oriented and well-equipped with a wide range of learning and teaching materials. It also has a teaching laboratory and a lecture theatre which can seat 80 students.

Residential courses are offered at the Centre for senior secondary students; 1500 students attend each year. Courses and seminars for teachers are also conducted at the Centre and EE talks for the general public are given as part of a wider programme of countryside education. The two universities, and other higher institutions of learning, frequently make use of the centre to conduct their own activities related to environmental education.

In addition to the environmental education offered by the Field Studies Centre, various divisions of the Education Department have organized campaigns such as "Clean Hong Kong" and have conducted regular environmental education activities such as the Training Camp for Student Conservation Leaders and the Forestry Work Camp. A particularly successful innovation has been the organization of extra-curricular activities related to environmental education in both primary and secondary schools.

Environmental education is also an important feature of the work of the Agriculture and Fisheries Department, which manages twenty-one country parks, covering about 40% of Hong Kong's land area, conducts regular guided tours along nature trails and arranges exhibitions, competitions and campaigns to promote environmental awareness. In addition, the Environmental Protection Agency provides a central source of expertise and scientific data on all aspects of environmental protection.

Nonformal EE activities are organized by the Hong Kong Conservation Association and World Wildlife Fund. These bodies promote environmental education for the general public through their publications and by sponsoring, organizing and conducting exhibitions, essay contests, seminars and projects on various environmental themes. The mass media — press, radio and television — contribute to EE by offering programmes that feature environmental problems and solutions.

Environmental Education at the University Level — Australia

Environmental education at the university level in Australia may be considered to have been launched by the national 1970 conference on "Education and the Environmental Crisis". On this occasion, a resolution was passed that all Vice-Chancellors of Australian universities be asked to include EE in their institutions.

Two universities responded in a major way — Murdoch University in western Australia with a School of Environmental and Life Sciences and Griffith University in Queensland with a School of Australian Environmental Studies. Both offer three-year undergraduate programmes leading to degrees with a possible honors year. New England University in New South Wales provides a three-year degree in natural resources as well as a graduate diploma and masters' degree.

There are now numerous Colleges of Advanced Education (CAE) conducting courses in environmental studies. The Royal Melbourne Institute of Technology is commencing an innovative course entitled "Environment, Technology, Society in Socio-Environment Assessment and Policy". At least one university in each State has established post-graduate EE programmes, most of which are two years full-time or four to five years part-time study. Monash University in Victoria offers some 150 optional units.

Twenty-five per cent of the EE students are teachers from schools or universities. This is considered the most effective method of introducing EE into schools, particularly. Often studying in their own free time, these teacher-students work alongside environmental managers, who are part-time teachers, in their courses and research. At Deakin University an innovative EE teacher-training programme has been introduced, permitting practising teachers to study EE by correspondence. All participate as well in workshops and seminars at the university. Since 1981, there have been 105 teachers trained under this programme.

A network has been established linking graduates of all Australian university programmes in EE. Those listed are encouraged to meet at least once a year during World Environment Week. The Australian Association for EE was inaugurated in Canberra in 1979 and regularly produces a newsletter, which now serves as a link in an Australian-Asian network. A section of the newsletter is devoted to Asian EE matters.

(The above article is based on a more extensive report by Prof. E.H.M. Ealey, which appears in *A Record of the Regional Seminar on the Transfer of EE to Planners and Decision-Makers in Southeast Asia, 6-9 December 1983*. For more information, write to: Secretary-General, ACHEE, School of Urban and Regional Planning, University of the Philippines, Diliman, Quezon City, Philippines.)

Seminar on Nonformal Scientific Environmental Education

A subregional seminar for Arab States on "Nonformal Scientific Environmental Education" was organized by Unesco with the cooperation of the Faculty of Sciences of the Mohammed V University and held in Rabat, Morocco, 15-20 October 1984. There were seventeen participants from six countries – Egypt, Jordan, Libyan Arab Jamahiryia, Sudan, Tunisia and the host nation, Morocco – representing youth clubs, the mass media and various government ministries (Education, Public Health, Agriculture, Environment, etc.).

Discussions and recommendations followed the presentation of working documents on such themes as, "The Social-Cultural Environment and Nonformal Scientific EE", "The Domains of Nonformal Scientific EE" and "Objectives, Methods and Techniques of Nonformal EE". Techniques in the last case involved instructional modules on energy, natural resources, water problems and desertification and urban pollution. There were also special reports on youth science clubs and the role of the mass media as well as the work of various Moroccan ministries in nonformal EE.

In conclusion participants stressed the importance of widely diffusing the "message" of scientifically based environmental education to the general public. They noted the need for a regional strategy among Arab States to this effect and the necessity of developing appropriate instructional materials, including audio-visual aids. It was recommended that ministries of information ensure EE programmes for radio and television broadcasting and that ministries of education include a special EE section. It was also recommended that other out-of-school educational programmes, such as functional literacy, incorporate environmental themes and components.

(For more information, write: UNEDBAS, Unesco, 7 place de Fontenoy, 75700 Paris, France.)

EE News and Publications

A seminar on "Problems of Development, Environment and the National Resource Crisis in Asia-Pacific" brought together representatives of non-governmental organizations (NGOs) of the region, government and other planners, researchers, educators and mass-media practitioners. The seminar was organized by Sahabat Alam Malaysia (Friends of the Earth Malaysia). One result of the seminar was the forming of the **Asia-Pacific People's Environment Network** whose aim is to collect and disseminate information pertaining to environmental issues among the various NGOs of the Asia-Pacific region. A book has been published on the seminar, titled *Environmental Crisis in Asia-Pacific*. For more information, write: SAM, 37 Lorong Birch, Penang, Malaysia.

The Office of the UN Disaster Relief Co-ordinator (**UNDRO**) has published Volume II of its series on Disaster Prevention and Mitigation, titled *Preparedness Aspects*. Several sections deal with education, training and public information. The organization offers other publications of EE interest. For more information, write: UNDRO, Palais des Nations, CH-1211 Geneva 10, Switzerland. ◆ *Approaches to the Study of the Environmental Implications of Contemporary Urbanization* has been published (in English only) as No. 14 of **MAB Technical Notes**. Write: MAB Secretariat, Unesco, 7 place de Fontenoy, 75700 Paris, France. ◆ Useful for EE at the secondary level is the series of publications under the Population Education Programme Service of the **Unesco Regional Office for Education in Asia and the Pacific**, which deal with "Health and Home Economics", "Mathematics", "Social Studies" and "Science". For more information, write to the Unesco Regional Office, P.O. Box 1425, General Post Office, Bangkok 10500, Thailand.

The **World Commission on Environment and Development**, which has just been established, is an independent body with the aim of anticipating critical

environmental and development problems and proposing better ways and means for the world community to address them. The Commission is temporarily installed at: 15, route des Morillons, CH-1218 Geneva, Switzerland. ◆ The **Institute for a European Environment Policy** was established in 1976 to promote cooperation among bodies concerned with environmental policy, particularly the parliaments of Europe. It produces a bi-monthly newsletter in English, German and French based primarily on parliamentary documentation. For more information, write to the Institute at one of these three addresses: Aloys-Schulte-Str. 6, D-5300 Bonn, Germany; 55 rue de Varenne, 75341 Paris Cedex 7, France; 3 Endsleigh Street, London WC 1H 0DD, UK. ◆ The **Nordic Conference on Environmental Education** announces a meeting on EE of member countries to be held in Oslo, Norway, 17-19 June 1985. In connection with the meeting, a course will be conducted in English by teachers recruited from member states of the Council of Europe. For more information, write to: Astrid Sandås, Grunnskoleradet, Box 8137 Dep. 0033 Oslo 1, Norway. ◆ The **OECD Observer** of September 1984 has an article entitled "Economics and the Environment: Not Conflict but Symbiosis". Write to: OECD Information Service, 2 rue André-Pascal, 75775 Paris Cedex 16, France.

The **Environment Liaison Centre,** P.O. Box 72461, Nairobi, Kenya, is now publishing a supplement, entitled *Alert Info*, to accompany its regular bulletin, *Ecoforum*. ◆ **ENDA** (Environment and Development in the Third World), B.P. 3370, Dakar, Senegal, has just brought out a new periodical entitled *Vivre Autrement*, addressed to African consumers. ◆ *Newsletter* No. 22, December 1984, of the **African Social Studies Programme,** P.O. Box 44777, Nairobi, Kenya, contains an article entitled "Writing Environmental Social Studies for Young Learners: A Sample Chapter on the Religious Environment". Part II of the sample chapter will appear in the following issue. The newsletter normally includes articles of interest to environmental educators. ◆ The **Journal of Environmental Education,** Summer 1984, 4000 Albemarle St., N.W., Washington, D.C., 20016, U.S.A., is devoted to "Environmental Interpretation". (*Interpretation*, in an environmental context, has been defined as "an educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experiences, and by illustrative media, rather than simply to communicate factual information".) The *Journal of EE* now publishes abstracts of its articles in French and Spanish on the last two pages of each issue. ◆ The **Environmentalist** (Elsevier Sequoia S.A., P.O.Box 851, 1001 Lausanne 1, Switzerland), a quarterly journal, is publishing supplements on special subjects at irregular intervals. The latest (No. 8) is entitled "Conservation of Ecological Processes".

An illustrated colorful Final Report of the **Omani National EE Training Workshop**, held in Muscat, Oman, December 1983, is available in Arabic from the National Commission of Environmental Education, Ministry of Education, P.O.Box 3, Muscat, Oman. ◆ A book-length report on **The First National Congress for Environmental Education Futures: Policies and Practises,** 12-17 August 1983, is available from SMEAC Information Centre, The Ohio State University College of Education and School of Natural Resources, 1200 Chambers Road, Columbus, Ohio 43212, U.S.A. ◆ A bound, gold-lettered Final Report of a seminar on "Approaches to Environmental Education — Formal and Nonformal", held in Bangalore, **India**, 16-18 April 1984, has been issued by its organizers and sponsors: the Educator-Manufacturer Association (EDMA); the Department of Environment, Government of India; Department of Ecology and Environment, Government of Karnataka; and Unesco. There were thirty-seven participants from India. For more information, write: EDMA, 442, V Cross, Viveknagar, Bangalore 560 047, India. ◆ A workshop on environmental education for social studies teachers was held at the **Barbados** Community College, 3-6 April 1984. It was a follow-up to a similar EE workshop for science teachers, held a year previously. Both were organized under the patronage of the Ministry of Education and conducted by educators from Ohio State University (USA) in collaboration with the Caribbean Conservation Association. An article on the 1984 workshop appears in the June issue of *Caribbean Conservation News*, Savannah Lodge, The Garrison, Barbados. ◆ The June 1984 issue of the *Bulletin of* **Unesco's** Regional Office for Education in Africa is devoted to the teaching of science and technology and contains an article on "The Integration of Environmental Education into School Programmes". The Bulletin is published in English and French. For more information, write: Publications Service, BREDA, B.P. 3311, Dakar, Senegal.

An International Symposium on the Risks and Benefits of Energy Systems was held near Aachen, Federal Republic of Germany, 9-13 April 1984. It was organized by the International Atomic Energy Agency (**IAEA**) in cooperation with UNEP and WHO. The 180 participants representing thirty-six nations and eleven international organizations discussed the role of energy in the economy and in society, the risks and impacts of energy production, cost-effective measures to reduce risks and national energy strategies in response to global restraints. Forty scientific papers were presented and have since been published in a 671-page volume on the proceedings of the symposium. The papers appear in their original languages — English, French, Spanish and Russian — with a summary in English for the latter three languages. For more information, write: International Atomic Energy Agency, Wagramerstrasse 5, P.O.Box 100, A-1400 Vienna, Austria.

RECYCLE PAPER

Save trees.

Save trees. This issue is printed on recycled paper.

Connect is also published in French as *Connexion*, in Spanish as *Contacto*, in Russian as *Kontakt* and in Arabic as *Arrabita*. Contents are exactly the same in all editions. *Connect* is free. Reproduction of its contents is not only permitted, it is solicited and encouraged.

Connect

Published by Unesco

7, place de Fontenoy, 75700 Paris, France

S.A.G.I. - Paris. Printed in France

218/45975

BEST COPY AVAILABLE